Amendments to the Claims

1. (Currently Amended) A display system comprising a pair of displays, each having a polarized light output, the polarization for both displays being the same, the displays being at an angle to each other, and a beam splitter so positioned relative to the two displays at the bisectrix of said angle to combine images from the displays whereby one image is transmitted by the beam splitter and the other image is reflected by the beam splitter to provide direct view of images from the displays, and

wherein the displays and the beam splitter are in respective planes that are parallel to a common linear axis,

wherein light output from the displays is linear polarized,

wherein the light output from one of the displays that is reflected by the beam splitter has a polarization direction at 45 degrees to the linear axis and is transmitted along an optical path,

whereby upon reflection by the beam splitter the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path.

2. (Previously Presented) The display system of claim 1 in which the displays are flat panel LCDs.

3. (Original) The display system of claim 2 in which the LCDs are identical and the polarization of the LCDs are at 45 degrees to the horizontal, whereby an image from one LCD transmitted through the beam splitter for viewing and the image from the other LCD which is reflected from the beam splitter will have linear polarization at right angles.

4. (Previously presented) The display system of claim 3 in which polarizers are used to separate the images for right and left eye viewing.

13 5. (Original) The display system of claim 12, wherein the polarizers are polarized lenses in eyeglass frames.

46 6. (Currently Amended) The display system of claim 45, in which light output from the displays is linear polarized, and

wherein the polarization is modified by quarter wave plates, respectively, in the light paths from the displays so that the images from the respective displays as viewed via the beam splitter are separated by right and left circular polarized light.

14 7. (Currently Amended) The display system of claim 1, in which circular polarization is created by a single quarter wave plate located between the beam splitter and the eye of a viewer.

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4 8. (Previously Presented) The display system of claim 2, in which a stereo pair makes up a selected region of the images from the displays.

5 9. (Previously Presented) The display system of claim 2, in which the displays are disposed at right angles and are in the vertical planes.

6 10. (Previously Presented) The display system of claim 2, in which one display for direct viewing through the beam splitter is in the vertical plane and the display that is reflected in the beam splitter is in the horizontal plane.

7 11. (Currently Amended) The display system of claim 10, in which a stereo signal received by the display system is a stereo image pair and the display directly viewed through the beam splitter is in the vertical plane and is scanned from top to bottom and the display that is reflected by the beam splitter in the horizontal plane and is scanned from bottom to top.

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8 12. (Previously Presented) The display system of claim 10, in which the image signal for the display that is viewed by reflection by the beam splitter is inverted top to bottom.

9 13. (Previously Presented) The display system of claim 2, in which the image signal for the display that provides an image that is reflected is inverted from right to left electronically.

10 14. (Previously Presented) The display systems of claim 2, and in which a stereo signal is received as a stereo pair, one of the stereo pairs is provided to one display and the other of the stereo pairs is provided to the other display, and the display viewed through the beam splitter is scanned from left to right and the display that is reflected by the beam splitter for viewing is scanned from right to left.

15 15. (Previously Presented) The display system of claim 1 in which a field sequential signal is displayed such that alternate fields are displayed on both displays so that each field is displayed for a full frame.

16 16. (Currently Amended) The display system of claim 1, in which the displays are made up of red, green and blue color sub pixels to form picture elements and are arranged to overlay each other so as to minimize color halos and color fringes.

17 17. (Currently Amended) The display system of claim 16, wherein the directional organization of providing data to color sub pixels in one display is in one direction and the directional organization of providing data to color sub pixels in the other display is in the opposite direction.

18. (Previously Presented) The display system of claim 16 in which a field sequential signal is displayed such that alternate fields are displayed on the two displays so that each field is displayed for a full frame.

19. (Previously Presented) The display system of claim 1, further comprising a mount to position the displays relative to each other in perpendicular planes.

20. (Original) The display system of claim 19, wherein the mount includes a mount for the beam splitter.

21. (Previously Presented) The display system of claim 20, said mount including a cubical structure, the beam splitter being in the cubical structure and the cubical structure having open areas receiving light from the respective displays and passing such light to the beam splitter.

22. (Original) The display system of claim 1, further comprising a light absorber for absorbing light from the beam splitter which is not directed to a viewer for viewing.

23. (Previously Presented) The display system of claim 1, further comprising a package for containing the displays and the beam splitter.

24. (Currently Amended) The display system of claim 23, said package comprising cover portions coupled by a hinge and movable to contain in protected relation the displays and beam splitter and openable to provide access to and use of the displays and beam splitter.

25. (Previously Presented) The display system of claim 24, said cover portions being openable to permit arrangement of the displays in perpendicular planes with the beam splitter therebetween.

26. (Previously Presented) The display system of claim 24, said cover portions being openable to permit arrangement of the displays in parallel relation in a common plane.

27. (Original) The display system of claim 1, further comprising a data processing system for obtaining and organizing image data and presenting the image data for display.

28. (Currently Amended) The display system of claim 27, said data processing system including a processor, a memory and connections to the respective displays.

29. (Previously Presented) The display system of claim 28, further comprising operating software to invert the data for presentation to one of the displays for displaying the data in inverted relation to the data displayed by the other displays.

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30. (Currently Amended) A packaged stereoscopic display system, comprising a pair of displays, a beam splitter, a storage package containing the displays and beam splitter, the storage package including a pair of cover portions and a hinge connecting the cover portions allowing the cover portions to be closed to contain in protected closed relation the displays and beam splitter, and to be opened to expose the displays and beam splitter in respective operative relation such that the beam splitter is so positioned relative to the two displays that one can be viewed directly through the beam splitter and the other can be viewed by reflected light from the beam splitter to present stereoscopic images for viewing , and

wherein in such operative relation the displays and the beam splitter are in respective planes that are parallel to a common linear axis,

wherein light from the displays is linear polarized,

wherein the light from one of the displays that is reflected by the beam splitter has a polarization direction at 45 degrees to the linear axis and is transmitted along an optical path,

whereby upon reflection by the beam splitter the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path .

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34 ~~31~~. (Currently Amended) A method of displaying stereo images, comprising simultaneously displaying a left image on a display and a right image on another display such that the left and right images have optical polarization in the same direction, and using a beam splitter so positioned relative to the two displays that one can be viewed directly through the beam splitter and the other can be viewed by reflected light from the beam splitter combining those images in a common light path such that the optical polarization of the left image portion and the right image portion are different in such common light path , and

wherein light forming said images is linear polarized light, and the polarization direction of the linear polarized light forming one of said images is at 45 degrees to a linear axis and is transmitted (propagates) along an optical path,

said combining comprising reflecting into such common light path such linear polarized light forming said one of said images by using the beam splitter with the beam splitter in a plane that is parallel to and intersects the linear axis,

whereby the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path.

35 ~~32~~. (Previously Presented) The method of claim 34 ~~31~~, further comprising discriminating the respective images in the common light path using optical polarization.

36 ~~33~~. (Currently Amended) The method of claim 34 ~~31~~, wherein the images are color images, each being composed of an assemblage of lines of different respective colors, and wherein the color image from one display is in an arrangement in one sequence and the color image from the other display is in an arrangement in the opposite sequence.

38 ~~34~~. (Currently Amended) A method of presenting a stereoscopic image for viewing, comprising presenting a left eye image on a display, presenting a right eye image on another display that is at an angle relative to the first mentioned display, both said presenting steps presenting such images having optical polarization in the same

direction, and using a beam splitter that is so positioned relative to the two displays that one can be viewed directly through the beam splitter and the other can be viewed by reflected light from the beam splitter combining in a substantially common light path the respective images such that the respective images in the common light path have different optical polarization, whereby the images can be separated based on polarization so that one image can be viewed directly through the beam splitter by one eye and the other can be viewed by reflected light from the beam splitter by the other eye , and

wherein the displays are in respective planes that are parallel to a linear axis and light forming said images is linear polarized light, and the polarization direction of the linear polarized light forming one of said images is at 45 degrees to the linear axis and is transmitted (propagates) along an optical path,

said combining comprising reflecting into such common light path such linear polarized light forming said one of said images by using the beam splitter with the beam splitter in a plane that is parallel to and intersects the linear axis,

whereby the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path.

39 ~~35.~~ (Original) The method of claim ~~34~~ 38, further comprising discriminating between the left eye image and right eye image for viewing by respective left and right eyes the respective left and right eye images from the light in the common light path.

40 ~~36.~~ (Previously Presented) The method of claim ~~34~~ 38, further comprising inverting the image data for one of the images for presenting for viewing in substantially superposed relation to the other image.

37. (Canceled)

38. (Canceled)

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41 39. (Previously Presented) The method of claim 40 36, said inverting comprising inverting from top to bottom.

42 40. (Previously Presented) The method of claim 40 36, said inverting comprising inverting from left to right.

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

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30 45. (Currently Amended) The display system of claim 1, wherein the displays are flat panel displays having a generally rectangular shape and the direction of polarization for both displays is diagonal relative to such generally rectangular shape.

31 46. (Currently Amended) The display system of claim 1, wherein the beam splitter combines images from both displays to provide viewable overlapping images that respectively have crossed polarization.

47 47. (Currently Amended) The display system of claim 59 45, wherein the polarization for both displays is circular.

48 48. (Previously Added) The display system of claim 47, wherein the beam splitter combines images from both displays to provide viewable overlapping images that respectively have circular polarization in opposite directions.

49. (Canceled)

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50. (Canceled)

54 51. (Currently Amended) The method of claim 64 53, wherein said displaying comprises displaying such left and right images having circular polarization.

52. (Canceled)

43 53. (Previously Added) The method of claim 34 38, wherein both said presenting steps present such images having linear polarization.

61 54. (Currently Amended) The method of claim 70 60, wherein both said presenting steps present such images having circular polarization.

16 55. (New) The display system of claim 2 in which the LCDs are identical.

32 56. (New) The display system of claim 1, in which circular polarization is created by a wave plate located between the beam splitter and the eye of a viewer.

37 57. (New) The method of claim 31, said displaying comprising displaying the images on respective identical LCDs.

44 58. (New) The method of claim 34 38, said presenting comprising presenting images on respective identical LCDs.

45 59. (New) A display system comprising a pair of displays, each having a polarized light output, the polarization for both displays being the same, the displays being at an angle to each other, and a beam splitter so positioned relative to the two displays at the bisectrix of said angle to combine images from the displays whereby one image is transmitted by the beam splitter and the other image is reflected by the beam splitter to provide direct view of images from the displays, and

wherein the displays and the beam splitter are in respective planes that are parallel to a common linear axis,

wherein the light incident on the beam splitter from the two displays has circular polarization in the same sense,

whereby upon reflection by the beam splitter the polarization sense of the reflected circular polarized light is reversed relative to the polarization sense of the circular polarized light prior to reflection.

49 ~~60~~. (New) The display system of claim ~~59~~ 45 in which the displays are flat panel LCDs.

~~50 61~~. (New) The display system of claim ~~60~~ 49, wherein the flat panel LCDs are identical.

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~~51 62~~. (New) The display system of claim ~~59~~ 45, wherein the light from both displays is left circular polarized light.

~~52 63~~. (New) The display system of claim ~~59~~ 45, wherein the light from both displays is right circular polarized light.

~~53 64~~. (New) A method of displaying stereo images, comprising simultaneously displaying a left image on a display and a right image on another display such that the left and right images have optical polarization in the same direction, and using a beam splitter so positioned relative to the two displays that one can be viewed directly through the beam splitter and the other can be viewed by reflected light from the beam splitter combining those images in a common light path such that the optical polarization of the left image portion and the right image portion are different in such common light path , and

wherein the light representing the respective images as it is incident on the beam splitter has circular polarization in the same sense,

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said combining comprising reflecting light representing one of such images, whereby such reflecting reverses the polarization direction of the reflected light.

55 ~~65~~. (New) The method of claim ~~64~~ 53, further comprising discriminating the respective images in the common light path using optical polarization.

56 ~~66~~. (New) The method of claim ~~64~~ 53, wherein the images are color images, each being composed of an assemblage of lines of different respective colors, and wherein the color image from one display is in an arrangement in one sequence and the color image from the other display is in an arrangement in the opposite sequence.

57 ~~67~~. (New) The method of claim ~~64~~ 53, wherein the sense of light from both displays is left circular polarized light.

58 ~~68~~. (New) The method of claim ~~64~~ 53, wherein the sense of light from both displays is right circular polarized light.

59 ~~69~~. (New) The method of claim ~~64~~ 53, said displaying comprising displaying images in identical LCDs.

60 ~~70~~. (New) A method of presenting a stereoscopic image for viewing, comprising presenting a left eye image on a display, presenting a right eye image on another display that is at an angle relative to the first mentioned display, both said presenting steps presenting such images having optical polarization in the same direction, and using a beam splitter that is so positioned relative to the two displays that one can be viewed directly through the beam splitter and the other can be viewed by reflected light from the beam splitter combining in a substantially common light path the respective images such that the respective images in the common light path have different optical polarization, whereby the images can be separated based on polarization so that one image can be viewed directly through the beam splitter by one

eye and the other can be viewed by reflected light from the beam splitter by the other eye , and

wherein the displays are in respective planes that are parallel to a linear axis and light forming said images is polarized light,

wherein the polarized light representing respective images is circular polarized light having the same sense,

wherein said combining comprising reflecting into such common light path such polarized light forming said one of said images by using the beam splitter with the beam splitter in a plane that is parallel to and intersects the linear axis,

whereby the polarization sense of polarization of the reflected circular polarized light is reversed by reflection by the beam splitter such that the sense of the light reflected by the beam splitter is opposite the sense of polarization of the light transmitted by the beam splitter.

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62 ~~71.~~ (New) The method of claim ~~70~~ 60, further comprising discriminating between the left eye image and right eye image for viewing by respective left and right eyes the respective left and right eye images from the light in the common light path.

63 ~~72.~~ (New) The method of claim ~~70~~ 60, further comprising inverting the image data for one of the images for presenting for viewing in substantially superposed relation to the other image.

64 ~~73.~~ (New) The method of claim ~~72~~ 63, said inverting comprising inverting from top to bottom.

65 ~~74.~~ (New) The method of claim ~~72~~ 63, said inverting comprising inverting from left to right.

66 ~~75.~~ (New) The method of claim ~~70~~ 60, wherein the sense of light from both displays is left circular polarized light.

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67 ~~78.~~ (New) The method of claim ~~70~~ 60, wherein the sense of light from both displays is right circular polarized light.

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68 ~~77.~~ (New) The method of claim ~~70~~ 60, said displaying comprising displaying images in identical LCDs.

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